Vermilion snapper age workshop

Oct. 23 and 24, Beaufort, NC
Present: Jennifer Potts (NMFS), Stephanie McInerny (NMFS), Marcel Reichert (SC-DNR), Paulette Mikell (SC-DNR), and Jessica Stephen (SC-DNR).

Comparisons between NMFS and SC-DNR labs

We discussed how we compare ages and agreed that a comparison of "advanced" ages is the most appropriate approach and will eliminate some "false" disagreements. Preliminary analysis of readings of 100 VS otoliths yielded an absolute agreement of 55% (st.dev. 7%), and an agreement of 86% (st.dev. 5%) within 1 year.

The group discussed differences in age readings, and examined several otoliths from both younger and older fish. We concluded that both labs are interpreting similar structures as annual increments. There are no consistent differences in the identification of the first increment, the so-called "double" increments, and the edge structure. Differences of more than 2 years in the estimated age in a small number of otoliths could be explained by the complexity of structure of the particular otoliths; these otoliths were consistently classified as quality C or worse.

In conclusion, there does not seem to be a consistent bias in the readings between readers or between and among labs. We will continue to exchange vermilion snapper otoliths to monitor age readings.

Calendar age

We will advance ages (+1 year) of fish collected between January 1 and August 31 (date of the completion of increment formation) with otoliths having an edge type 3 and 4.

Continued calibration efforts

To further examine the structure of the first increment, SC-DNR personnel will age 100 otoliths from small fish collected by NMFS-Beaufort in the 80's. SC-DNR has a similar otolith set of relatively small fish. We will also using the age readings of theses fish not only to examine the structure of the first otolith, but also to compare ages of small fish from the 80's to those collected in 2005-06.

SC-DNR staff (Paulette and Marcel) will read 20% of the otoliths that are processed for NMFS-Beaufort. These data will be used to further compare readings and estimate variability or potential bias between labs.

Preparation of the SEDAR 17, VS data workshop (scheduled for May 19-23, 2008)

Data through 2007 will be requested. NMFS Beaufort staff is concerned about the timely availability of the otoliths for analysis.

Because of time constraints NMFS Beaufort is randomly subsampling by state, fishery and year. These samples are processed by SC-DNR, but will be read by NMFS, Beaufort personnel.

Potential data issues

There are indications that there are regional differences in the date of formation of the annulus (earlier in the year off Florida) and growth characteristics? If there are, this has consequences for the "rules" of advancing age. We will check this.

There are some gaps in the age readings in the MARMAP data prior to 2002. SC-DNR staff will try to fill as much of these gaps as possible before the data workshop.

Important SEDAR 17 dates:

Scoping conference call: January 2008
Data workshop: May 19-23, 2008 (Charleston)
Assessment workshop: August 25-29, 2008

Prepared by Marcel Reichert.